



Brazilian Merganser (*Mergus octosetaceus*)

Update October 2021

The year 2021 has been very successful for the Brazilian Merganser Project and, before the year is over, we would like to send this update to all of our sponsors. It is important that you all have a feedback about the accomplishments of the project and the latest news.



Expedition 'Chapada dos Veadeiros'

Through the partnership between Zooparque Itatiba and ICMBio (the Institute of Conservation with the Ministry of Environment), we were able to collect eggs from Chapada dos Veadeiros, in the state of Goiás. This was very important as we had never collected eggs from this region before, and these new bloodlines are essential for the *ex situ* population of mergansers.

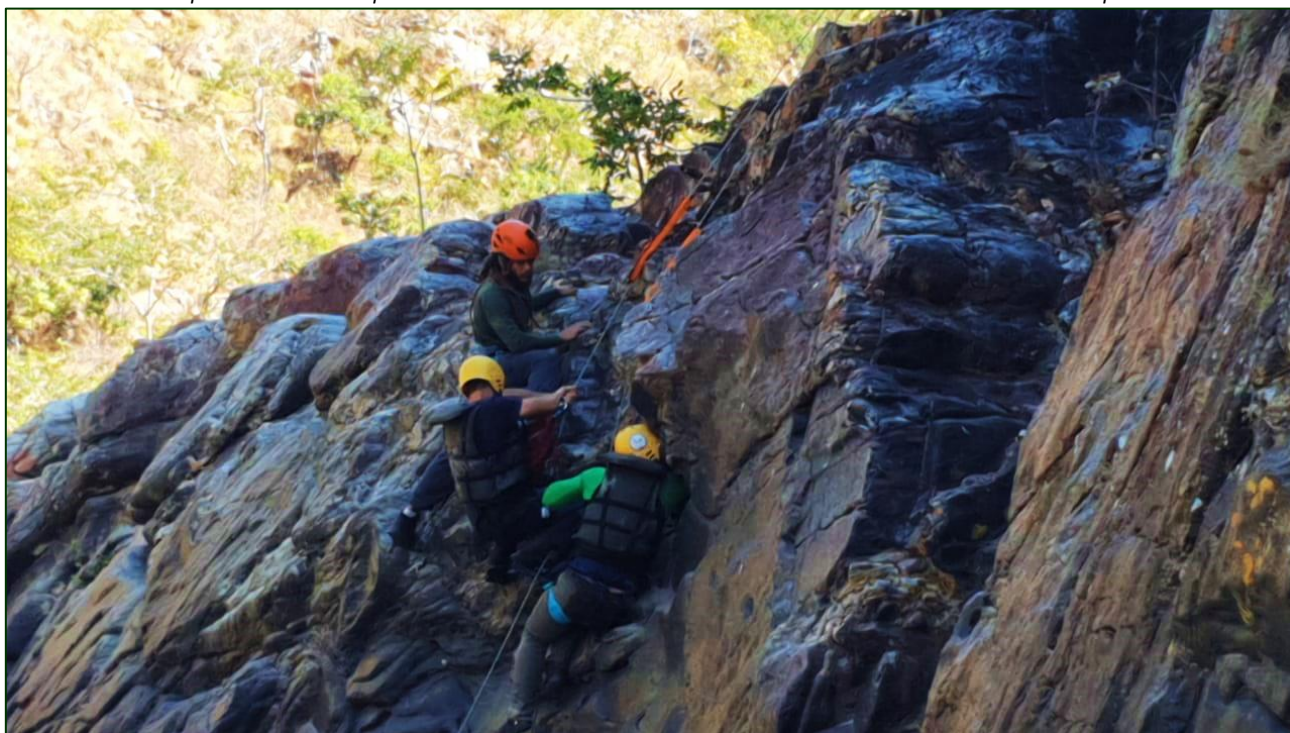
From the 6 eggs collected from 2 different nests, 4 were placed with a foster parent and 2 were artificially incubated.



Expedition in the Chapada dos Veadeiros



Team involved in the expedition



Collecting the eggs from the nest – 4 eggs were collected in this nest

Breeding season

In this year's breeding season, we celebrated the hatch of 11 ducklings, including the 6 eggs collected in Chapada dos Veadeiros, the other 5 ducklings are from our F2 pair in the zoo.

Our breeding season at the zoo didn't turn out to be so successful. From the 3 clutches we registered, only 1 hatched and the other 2 were infertile. We suspect that this happened because of the unusual weather we experienced in Itatiba in 2021. During the merganser's breeding season, the weather was extremely dry and



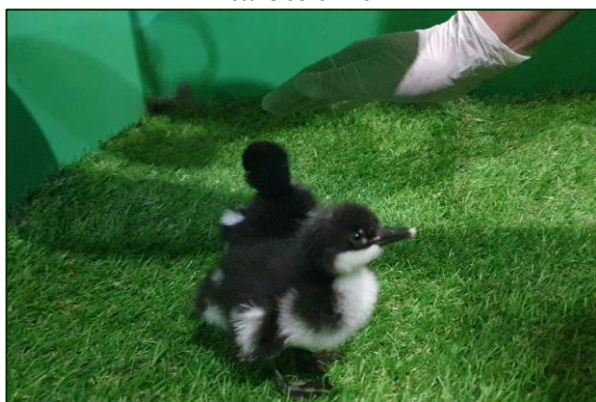
cold, which is not normal for this region, and we suspect it had a negative impact in the reproduction of the birds.



Picture 03-07-2021



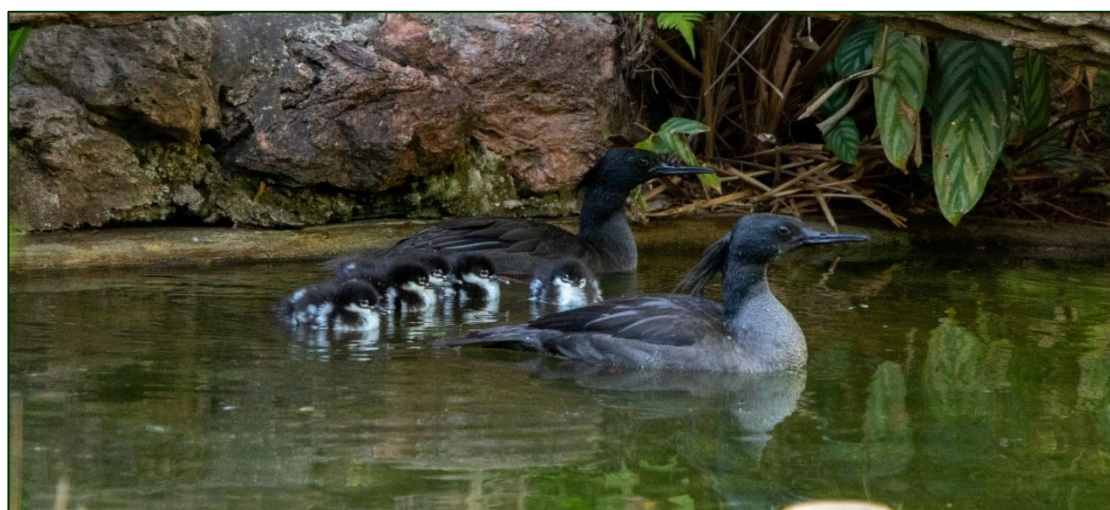
Picture 21-09-2021



Picture 09-07-2021



Picture 21-09-2021



Picture 09-08-2021



Picture 21-09-2021

Today we have a total of 39 adult birds (12,27), and 11 adolescences.

Scientific research

Though out all the years Zooparque Itatiba has cared for the *ex situ* population of Brazilian mergansers, we were able to collect a lot of information about the species, and now it's time to use all this knowledge in a way that can be of help to all the scientific community.

Especially during this breeding season, the zoo team focused on studying a specific growth panorama for the species. For this to happen, the team has registered daily photographs of the birds and taken weekly biometric measurements so we can understand better the development of the mergansers. In addition, this study will help the other institutions that work with the species *in situ*, so they can estimate the age of the youngsters the see in the wild.



Biometric measurements – Day 1



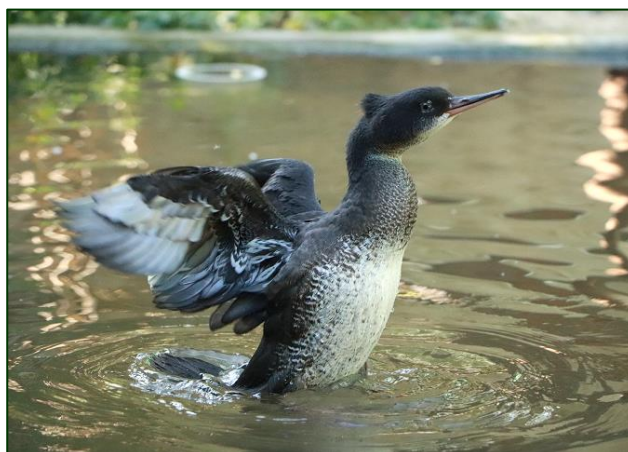
Biometric measurements – Day 93



Changes observed in the wings during the growth of the birds



Picture 06-07-2021



Picture 06-09-2021

The next step is use all the data collected using the security cameras to study the behavior of the species. A positive point in using the cameras is that we will not cause any interference in their natural behavior.



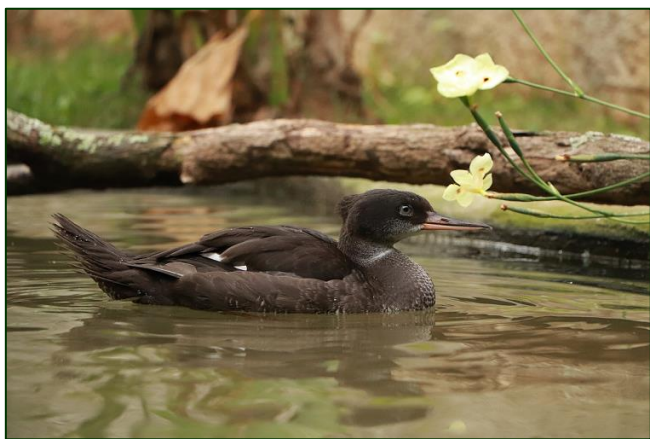
Hopefully we can share details of this research in the near future.

Tracking the birds

With the reproduction project going according to plan, now it's time to think about the reintroduction of the birds. But before we do that, it's important to determine the best way to monitor the birds once they're released in the wild. For that to happen, Zooparque Itatiba got in contact with many professionals that already work with satellite tracking birds around the world. This first conversation was possible with the help of Jan Harteman, from Aviornis. The device that probably will be used in the mergansers is a Solar Power PTT that provides the animal location through the Argos system.

However, before acquiring the transmitters, a prototype will be made using the corresponding measurements and specifications and used in a merganser from the *ex situ* population. This way we can test if the animal will adapt well to the transmitter.

Thanks to the support of Aviornis, we will purchase one transmitter and we can accomplish the goal to track the animal in the wild and discover where the youngsters go when they leave their parents, as this is still a big mystery



Conclusion

All the work done in 2021 for the *ex situ* conservation of the Brazilian Merganser was only possible with the support of all our sponsors, so Zooparque Itatiba would like to thank all of you, without you this project wouldn't be so successful.



Hope that you have a good holiday season and that we'll be working together again in 2022.



Thank you very much!

Robert Frank Kooij
Responsible Project Manager
Camila Piovani
Responsible Biologist

